

ABSTRACT

The present invention relates to a seed crystal consisting of a silicon carbide single crystal suitable for producing a substrate (wafer) for an electric power device, a high-frequency device or the like, and a method for producing an ingot using the same. A single crystal growing face of a seed crystal consisting of a silicon carbide single crystal is inclined at an angle ranging from 3 degrees or more to 60 degrees or less with respect to the (11-20) face to a direction inclined at an angle ranging from -45 degrees or more to 45 degrees or less from a $\langle 0001 \rangle$ direction to the $[1-100]$ direction. By performing crystal growth using such a seed crystal, a high quality silicon carbide single crystal ingot can be obtained. According to the present invention, it is possible to obtain material consisting of a silicon carbide single crystal of favorable quality, which has few crystal defects such as micropipe defects and stacking faults, and the diameter is suitable for practical application.